

## In the Claims

**1. (currently amended)** A process for increasing the molecular weight and/or for the modification of a polycondensate, which process comprises adding to the polycondensate

a) at least one bis-acyllactam~~[[;]]~~ and

b1) at least one phosphite, phosphinate or phosphonate; or

b2) at least one benzofuran-2-one type compound or

b3) at least one phosphite, phosphinate or phosphonate and one benzofuran-2-one type compound and

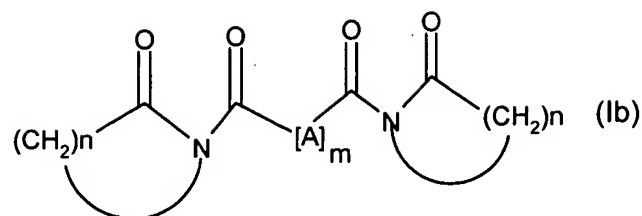
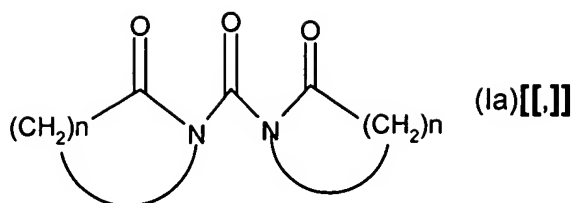
processing the mixture in the melt.

**2. (currently amended)** A process according to claim 1 wherein the polycondensate is an aliphatic or aromatic polyester, an aliphatic or aromatic polyamide or polycarbonate~~[[;]]~~ or a blend or copolymer thereof.

**3. (currently amended)** A process according to claim 1 wherein the polycondensate is polyethylene terephthalate (PET), polybutylene terephthalate (PBT), polyethyleneterephthalate (PEN), a copolyester, PA 6, PA 6,6~~[[;]]~~ or a polycarbonate containing bisphenol A, bisphenol Z or bisphenol F linked via carbonate groups.

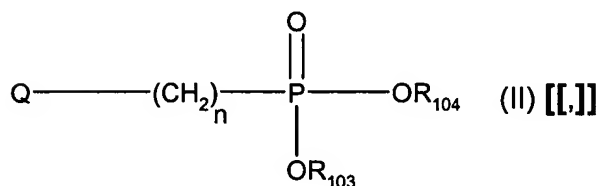
**4. (original)** A process according to claim 1 wherein the polycondensate is PET or PBT or a copolymer of PET or PBT.

**5. (currently amended)** A process according to claim 1 wherein the bis-acyllactam is of formula Ia or Ib



wherein A is C<sub>1</sub>-C<sub>18</sub>alkylene, C<sub>2</sub>-C<sub>18</sub>alkylene interrupted by at least one oxygen atom, C<sub>1</sub>-C<sub>18</sub>alkenylene, phenylene, phenylene-C<sub>1</sub>-C<sub>18</sub>alkylene, C<sub>1</sub>-C<sub>18</sub>alkylene-phenylene [1.1] or C<sub>1</sub>-C<sub>18</sub>alkylene-phenylene-C<sub>1</sub>-C<sub>18</sub>alkylene;  
m is 0 or 1 and  
n is a number from 3 to 12.

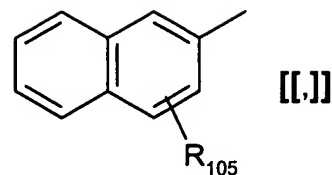
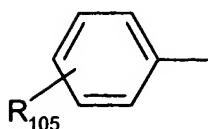
6. (currently amended) A process according to claim 1 wherein the phosphonate is of formula II



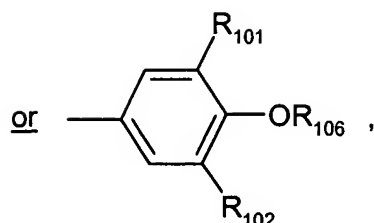
wherein

R<sub>103</sub> is H, C<sub>1</sub>-C<sub>20</sub>alkyl [1.1] or unsubstituted or C<sub>1</sub>-C<sub>4</sub>alkyl-substituted phenyl or naphthyl,  
R<sub>104</sub> is hydrogen, C<sub>1</sub>-C<sub>20</sub>alkyl [1.1] or unsubstituted or C<sub>1</sub>-C<sub>4</sub>alkyl-substituted phenyl or naphthyl;  
or is M<sup>r+</sup> / r,  
M<sup>r+</sup> is an r-valent metal cation or the ammonium ion,  
n is 0, 1, 2, 3, 4, 5 or 6 [1.1] and  
r is 1, 2, 3 or 4;

Q is hydrogen,  $-X-C(O)-OR_{107}$  [1.1] or a radical

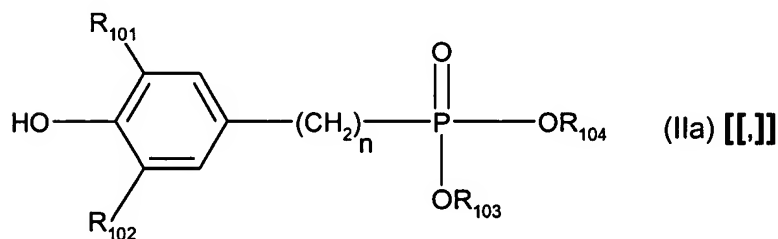


[1.1]



$R_{101}$  is isopropyl, tert-butyl, cyclohexyl, or cyclohexyl which is substituted by 1-3  $C_1-C_4$ alkyl groups,  
 $R_{102}$  is hydrogen,  $C_1-C_4$ alkyl, cyclohexyl, or cyclohexyl which is substituted by 1-3  $C_1-C_4$ alkyl groups,  
 $R_{105}$  is H,  $C_1-C_{18}$ alkyl, OH, halogen or  $C_3-C_7$ cycloalkyl;  
 $R_{106}$  is H, methyl, trimethylsilyl, benzyl, phenyl, sulfonyl or  $C_1-C_{18}$ alkyl;  
 $R_{107}$  is H,  $C_1-C_{10}$ alkyl or  $C_3-C_7$ cycloalkyl [1.1] and  
X is phenylene,  $C_1-C_4$ alkyl group-substituted phenylene or cyclohexylene.

**7. (currently amended)** A process according to claim 6 wherein the phosphonate is of formula IIa



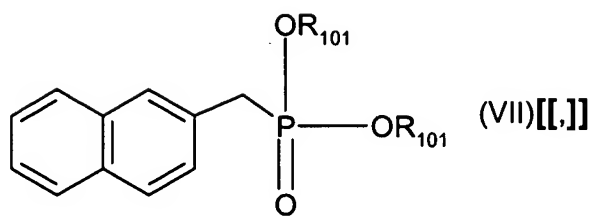
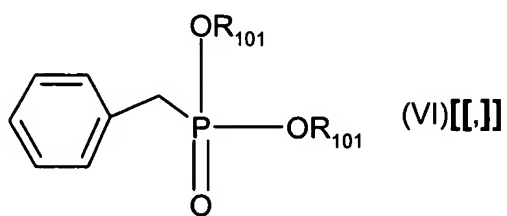
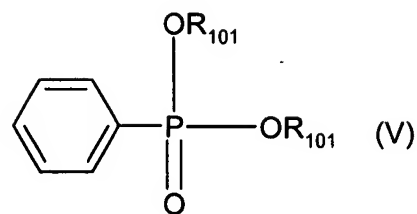
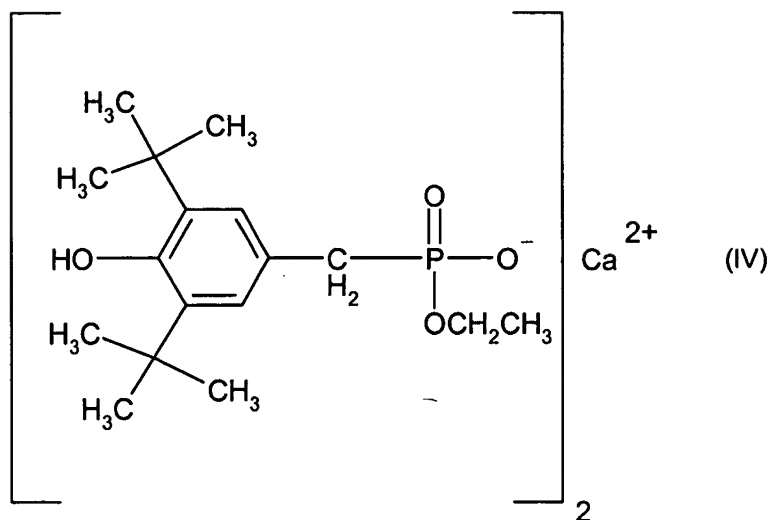
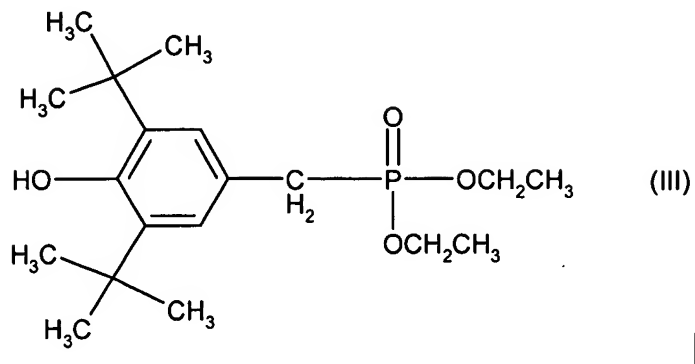
wherein

$R_{101}$  is H, isopropyl, tert-butyl, cyclohexyl, or cyclohexyl which is substituted by 1-3  $C_1-C_4$ alkyl groups,  
 $R_{102}$  is hydrogen,  $C_1-C_4$ alkyl, cyclohexyl, or cyclohexyl which is substituted by 1-3  $C_1-C_4$ alkyl groups,  
 $R_{103}$  is  $C_1-C_{20}$ alkyl [1.1] or unsubstituted or  $C_1-C_4$ alkyl-substituted phenyl or naphthyl,  
 $R_{104}$  is hydrogen,  $C_1-C_{20}$ alkyl [1.1] or unsubstituted or  $C_1-C_4$ alkyl-substituted phenyl or naphthyl;  
or is  $M^{r+}$  / r;  
 $M^{r+}$  is an r-valent metal cation,

r is 1, 2, 3 or 4 [[:]] and

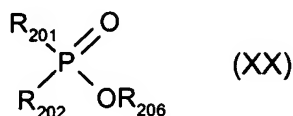
n is 1, 2, 3, 4, 5 or 6.

8. (currently amended) A process according to claim [[:]]6 wherein the phosphonate is of formula III, IV, V, VI or VII



wherein the  $R_{101}$  are each independently of one another hydrogen or  $M^{r+}$  / r. [[:]]

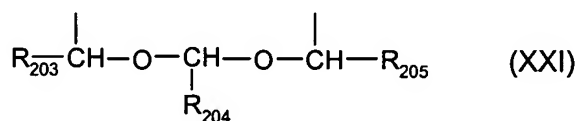
**9. (currently amended)** A process according to claim 1 wherein the phosphinates are of the formula XX



wherein

$\text{R}_{201}$  is hydrogen,  $\text{C}_1\text{-C}_{20}$ alkyl, phenyl or  $\text{C}_1\text{-C}_4$ alkyl substituted phenyl; biphenyl, naphthyl,  $-\text{CH}_2\text{-O-C}_1\text{-C}_{20}$ alkyl or  $-\text{CH}_2\text{-S-C}_1\text{-C}_{20}$ alkyl,

$\text{R}_{202}$  is  $\text{C}_1\text{-C}_{20}$ alkyl, phenyl or  $\text{C}_1\text{-C}_4$ alkyl substituted phenyl; biphenyl, naphthyl,  $-\text{CH}_2\text{-O-C}_1\text{-C}_{20}$ alkyl or  $-\text{CH}_2\text{-S-C}_1\text{-C}_{20}$ alkyl, or  $\text{R}_{201}$  and  $\text{R}_{202}$   $\text{R}_1$  and  $\text{R}_2$  together are a radical of the formula XXI



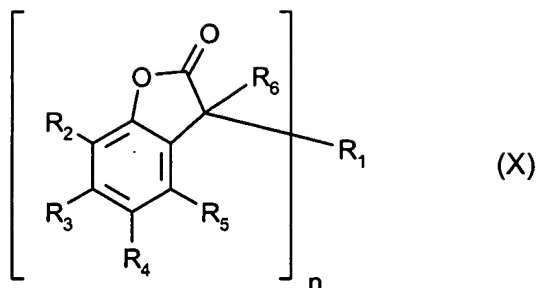
wherein

$\text{R}_{203}$ ,  $\text{R}_{204}$  and  $\text{R}_{205}$  independently of each other are  $\text{C}_1\text{-C}_{20}$ alkyl, phenyl or  $\text{C}_1\text{-C}_4$ alkyl substituted phenyl; and

$\text{R}_{206}$  is hydrogen,  $\text{C}_1\text{-C}_{18}$ alkyl or the ion of an alkali metal or the ammonium ion or

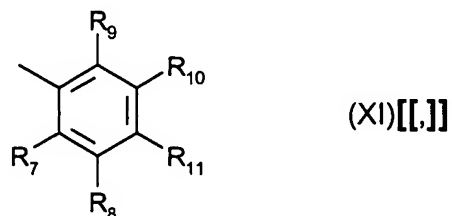
$\text{R}_{206}$  is a direct bond, which forms together with  $\text{R}_{202}$  an aliphatic or aromatic cyclic ester.

**10. (currently amended)** A process according to claim 1 wherein the benzofuran-2-one type compound is of formula X



wherein, if  $n = 1$ ,

$R_1$  is naphthyl, phenanthryl, anthryl, 5,6,7,8-tetrahydro-2-naphthyl, 5,6,7,8-tetrahydro-1-naphthyl, thienyl, benzo[b]thienyl, naphtho[2,3-b]thienyl, thianthrenyl, dibenzofuryl, chromenyl, xanthenyl, phenoxathiinyl, pyrrolyl, imidazolyl, pyrazolyl, pyrazinyl, pyrimidinyl, pyridazinyl, indoliziny, isoindolyl, indolyl, indazolyl, purinyl, quinoliziny, isoquinolyl, quinolyl, phthalazinyl, naphthyridinyl, quinoxalinyl, quinazolinyl, cinnoliny, pteridinyl, carbazolyl,  $\beta$ -carbolinyl, phenanthridinyl, acridinyl, perimidinyl, phenanthrolinyl, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazanyl, biphenyl, terphenyl, fluorenyl or phenoxazinyl, each of which is unsubstituted or substituted by  $C_1$ - $C_4$ alkyl,  $C_1$ - $C_4$ alkoxy,  $C_1$ - $C_4$ alkylthio, hydroxy, halogen, amino,  $C_1$ - $C_4$ alkylamino, phenylamino or di( $C_1$ - $C_4$ -alkyl)amino, or  $R_1$  is a radical of formula XI



and [.]

if  $n = 2$ ,

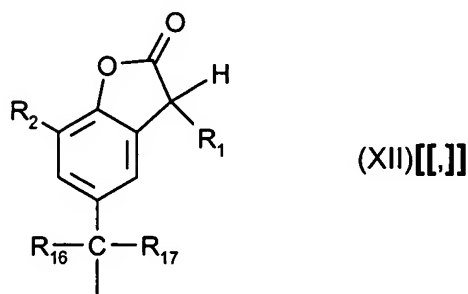
$R_1$  is unsubstituted or  $C_1$ - $C_4$ alkyl- or hydroxy-substituted phenylene or naphthylene; or  $-R_{12}-X-R_{13}-$ ,

$R_2$ ,  $R_3$ ,  $R_4$  and  $R_5$  are each independently of one another hydrogen, chloro, hydroxy,  $C_1$ - $C_{25}$ -alkyl,  $C_7$ - $C_9$ phenylalkyl, unsubstituted or  $C_1$ - $C_4$ alkyl-substituted phenyl; unsubstituted or  $C_1$ - $C_4$ alkyl-substituted  $C_5$ - $C_8$ cycloalkyl;  $C_1$ - $C_{18}$ alkoxy,  $C_1$ - $C_{18}$ alkylthio,  $C_1$ - $C_4$ alkylamino, di( $C_1$ - $C_4$ -alkyl)amino,  $C_1$ -

C<sub>25</sub>alkanoyloxy, C<sub>1</sub>-C<sub>25</sub>alkanoylamino, C<sub>3</sub>-C<sub>25</sub>alkenoyloxy; C<sub>3</sub>-C<sub>25</sub>alkanoyloxy which is interrupted by

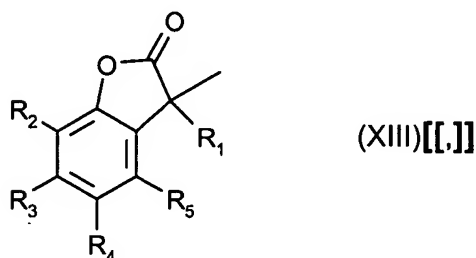
oxygen, sulfur or  $\text{>N-R}_{14}$  ; C<sub>6</sub>-C<sub>9</sub>cycloalkylcarbonyloxy, benzoyloxy or C<sub>1</sub>-C<sub>12</sub>alkyl-substituted

benzoyloxy; or R<sub>2</sub> and R<sub>3</sub>, or R<sub>3</sub> and R<sub>4</sub>, or R<sub>4</sub> and R<sub>5</sub>, together with the linking carbon atoms, form a benzene ring, R<sub>4</sub> is additionally -(CH<sub>2</sub>)<sub>p</sub>-COR<sub>15</sub> or -(CH<sub>2</sub>)<sub>q</sub>OH or, if R<sub>3</sub>, R<sub>5</sub> and R<sub>6</sub> are hydrogen, R<sub>4</sub> is additionally a radical of formula XII



wherein R<sub>1</sub> is as defined above for n = 1,

R<sub>6</sub> is hydrogen or a radical of formula XIII



wherein R<sub>4</sub> is not a radical of formula XII[[.]] and R<sub>1</sub> is as defined above for n = 1,

R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub> and R<sub>11</sub> are each independently of one another hydrogen, halogen, hydroxy,

C<sub>1</sub>-C<sub>25</sub>alkyl; C<sub>2</sub>-C<sub>25</sub>alkyl which is interrupted by oxygen, sulfur or  $\text{>N-R}_{14}$  ; C<sub>1</sub>-C<sub>25</sub>alkoxy;

C<sub>2</sub>-C<sub>25</sub>alkoxy which is interrupted by oxygen, sulfur or  $\text{>N-R}_{14}$  ; C<sub>1</sub>-C<sub>25</sub>alkylthio, C<sub>3</sub>-C<sub>25</sub>-alkenyl,

C<sub>3</sub>-C<sub>25</sub>alkenyloxy, C<sub>3</sub>-C<sub>25</sub>alkynyl, C<sub>3</sub>-C<sub>25</sub>alkynyloxy, C<sub>7</sub>-C<sub>9</sub>phenylalkyl, C<sub>7</sub>-C<sub>9</sub>phenylalkoxy, unsubstituted or C<sub>1</sub>-C<sub>4</sub>alkyl-substituted phenyl; unsubstituted or C<sub>1</sub>-C<sub>4</sub>alkyl-substituted phenoxy; unsubstituted or C<sub>1</sub>-C<sub>4</sub>alkyl-substituted C<sub>5</sub>-C<sub>8</sub>cycloalkyl; unsubstituted or C<sub>1</sub>-C<sub>4</sub>alkyl-substituted C<sub>5</sub>-C<sub>8</sub>cycloalkoxy; C<sub>1</sub>-C<sub>4</sub>alkylamino, di(C<sub>1</sub>-C<sub>4</sub>alkyl)amino, C<sub>1</sub>-C<sub>25</sub>alkanoyl; C<sub>3</sub>-C<sub>25</sub>alkanoyl which is interrupted by oxygen,

sulfur or  $\text{>N-R}_{14}$  ; C<sub>1</sub>-C<sub>25</sub>alkanoyloxy; C<sub>3</sub>-C<sub>25</sub>alkanoyloxy which is interrupted by oxygen, sulfur or

$\text{>N-R}_{14}$  ; C<sub>1</sub>-C<sub>25</sub>alkanoylamino, C<sub>3</sub>-C<sub>25</sub>alkenoyl; C<sub>3</sub>-C<sub>25</sub>alkenoyl which is interrupted by oxygen,

sulfur or  $\text{>N-R}_{14}$  ; C<sub>3</sub>-C<sub>25</sub>alkenoyloxy; C<sub>3</sub>-C<sub>25</sub>alkenoyloxy which is interrupted by oxygen, sulfur or

$\text{>N-R}_{14}$  ; C<sub>6</sub>-C<sub>9</sub>cycloalkylcarbonyl, C<sub>6</sub>-C<sub>9</sub>cycloalkylcarbonyloxy, benzoyl or C<sub>1</sub>-C<sub>12</sub>alkyl-substituted

benzoyl; benzoyloxy or C<sub>1</sub>-C<sub>12</sub>alkyl-substituted benzoyloxy;  $\text{—O—}\overset{\overset{\text{R}_{18}}{|}}{\underset{\underset{\text{R}_{19}}{|}}{\text{C}}}\text{—}\overset{\overset{\text{O}}{||}}{\text{C}}\text{—R}_{15}$  or

$\text{—O—}\overset{\overset{\text{R}_{20}}{|}}{\underset{\underset{\text{H}}{|}}{\text{C}}}\text{—}\overset{\overset{\text{R}_{21}}{|}}{\underset{\underset{\text{R}_{22}}{|}}{\text{C}}}\text{—O—R}_{23}$  or, in formula II, R<sub>7</sub> and R<sub>8</sub>, or R<sub>8</sub> and R<sub>11</sub>, together with the linking carbon

atoms, form a benzene ring,

R<sub>12</sub> and R<sub>13</sub> are each independently of the other unsubstituted or C<sub>1</sub>-C<sub>4</sub>alkyl-substituted phenylene or naphthylene,

R<sub>14</sub> is hydrogen or C<sub>1</sub>-C<sub>8</sub>alkyl,

R<sub>15</sub> is hydroxy,  $\left[ \text{—O}^- \frac{1}{r} \text{M}^{r+} \right]$ , C<sub>1</sub>-C<sub>18</sub>alkoxy or  $\text{—N}\begin{matrix} \text{R}_{24} \\ \text{R}_{25} \end{matrix}$ ,

R<sub>16</sub> and R<sub>17</sub> are each independently of the other hydrogen, CF<sub>3</sub>, C<sub>1</sub>-C<sub>12</sub>alkyl or phenyl, or R<sub>16</sub> and R<sub>17</sub>, together with the linking carbon atom, are a C<sub>5</sub>-C<sub>8</sub>cycloalkylidene ring which is unsubstituted or substituted by 1 to 3 C<sub>1</sub>-C<sub>4</sub>alkyl;



$R_{18}$  and  $R_{19}$  are each independently of the other hydrogen,  $C_1$ - $C_4$ alkyl or phenyl,

$R_{20}$  is hydrogen or  $C_1$ - $C_4$ alkyl,

$R_{21}$  is hydrogen, unsubstituted or  $C_1$ - $C_4$ alkyl-substituted phenyl;  $C_1$ - $C_{25}$ alkyl;  $C_2$ - $C_{25}$ alkyl which is

interrupted by oxygen, sulfur or  $\text{>N-R}_{14}$  ;  $C_7$ - $C_9$ phenylalkyl which is unsubstituted or substituted at the phenyl moiety by 1 to 3  $C_1$ - $C_4$ alkyl;  $C_7$ - $C_{25}$ phenylalkyl which is interrupted by oxygen, sulfur or

$\text{>N-R}_{14}$  and which is unsubstituted or substituted at the phenyl moiety by 1 to 3  $C_1$ - $C_4$ alkyl, or  $R_{20}$

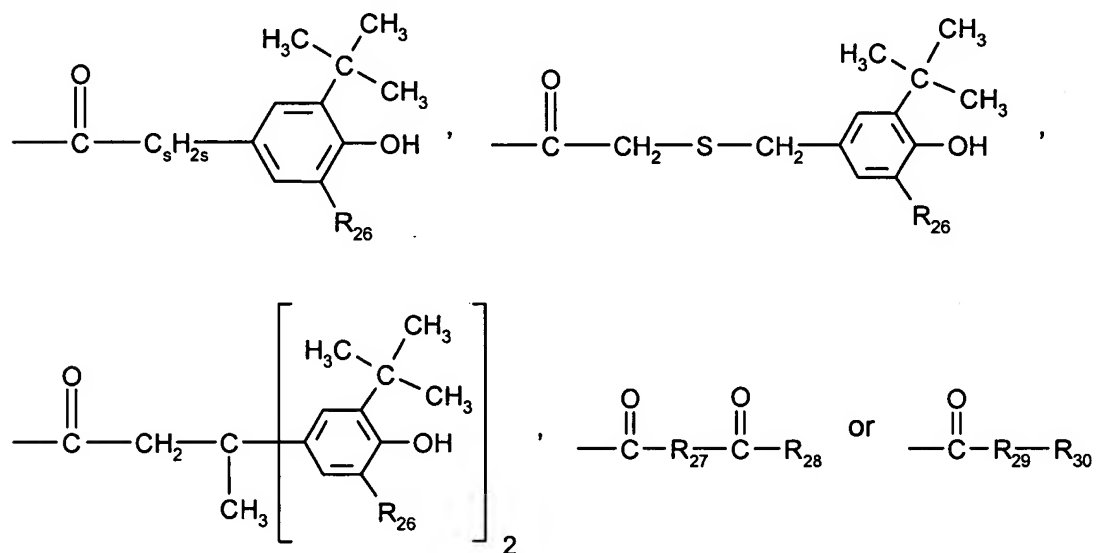
and  $R_{21}$ , together with the linking carbon atoms, form a  $C_5$ - $C_{12}$ cycloalkylene ring which is unsubstituted or substituted by 1 to 3  $C_1$ - $C_4$ alkyl;

$R_{22}$  is hydrogen or  $C_1$ - $C_4$ alkyl,

$R_{23}$  is hydrogen,  $C_1$ - $C_{25}$ alkanoyl,  $C_3$ - $C_{25}$ alkenoyl;  $C_3$ - $C_{25}$ alkanoyl which is interrupted by oxygen, sulfur

or  $\text{>N-R}_{14}$  ;  $C_2$ - $C_{25}$ alkanoyl which is substituted by a di( $C_1$ - $C_6$ alkyl)phosphonate group;

$C_6$ - $C_9$ cycloalkylcarbonyl, thenoyl, furoyl, benzoyl or  $C_1$ - $C_{12}$ alkyl-substituted benzoyl;



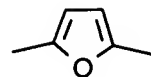
$R_{24}$  and  $R_{25}$  are each independently of the other hydrogen or  $C_1$ - $C_{18}$ alkyl,

$R_{26}$  is hydrogen or  $C_1$ - $C_8$ alkyl,

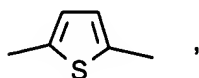
$R_{27}$  is a direct bond,  $C_1$ - $C_{18}$ alkylene;  $C_2$ - $C_{18}$ alkylene which is interrupted by oxygen, sulfur or

$\text{>N-R}_{14}$  ;  $C_2$ - $C_{18}$ alkenylene,  $C_2$ - $C_{20}$ alkylidene,  $C_7$ - $C_{20}$ phenylalkylidene,  $C_5$ - $C_8$ cycloalkylene,  $C_7$ -

C<sub>8</sub>bicycloalkylene, unsubstituted or C<sub>1</sub>-C<sub>4</sub>alkyl-substituted phenylene,



or



R<sub>28</sub> is hydroxy,  $\left[ -O^- \frac{1}{r} M^{r+} \right]$ , C<sub>1</sub>-C<sub>18</sub>alkoxy or  $-N \begin{matrix} R_{24} \\ R_{25} \end{matrix}$ ,

R<sub>29</sub> is oxygen, -NH- or  $\begin{matrix} \diagup \\ N \end{matrix} - \overset{O}{\parallel} C - NH - R_{30}$ ,

R<sub>30</sub> is C<sub>1</sub>-C<sub>18</sub>alkyl or phenyl,

R<sub>31</sub> is hydrogen or C<sub>1</sub>-C<sub>18</sub>alkyl,

M is an r-valent metal cation,

X is a direct bond, oxygen, sulfur or -NR<sub>31</sub>-,

n is 1 or 2,

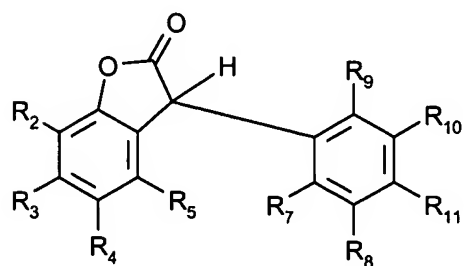
p is 0, 1 or 2,

q is 1, 2, 3, 4, 5 or 6,

r is 1, 2 or 3[<sub>1</sub>,<sub>2</sub>] and

s is 0, 1 or 2.

**11. (currently amended)** A process according to claim 10 wherein the benzofuran-2-one type compound is of formula XIV



(XIV)

wherein

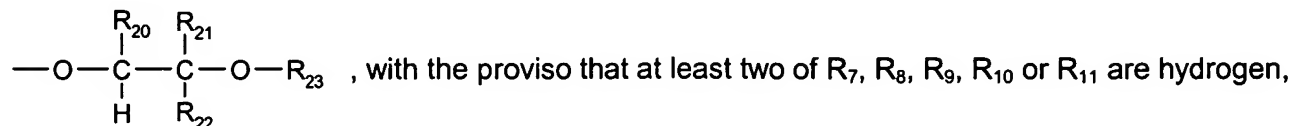
R<sub>2</sub> is hydrogen or C<sub>1</sub>-C<sub>6</sub>alkyl,

R<sub>3</sub> is hydrogen,

R<sub>4</sub> is hydrogen or C<sub>1</sub>-C<sub>6</sub>alkyl,

R<sub>5</sub> is hydrogen,

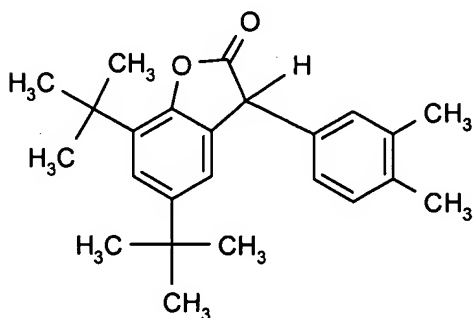
R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub> and R<sub>11</sub> are each independently of one another hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or



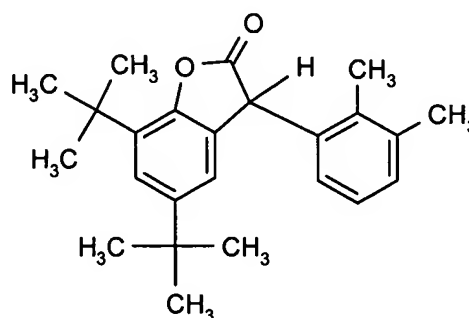
R<sub>20</sub>, R<sub>21</sub> and R<sub>23</sub> are hydrogen[[,]] and

R<sub>23</sub> is C<sub>2</sub>-C<sub>4</sub>alkanoyl.

**12. (original)** A process according to claim 11 wherein the benzofuran-2-one type compound is of formula XIVa or XIVb



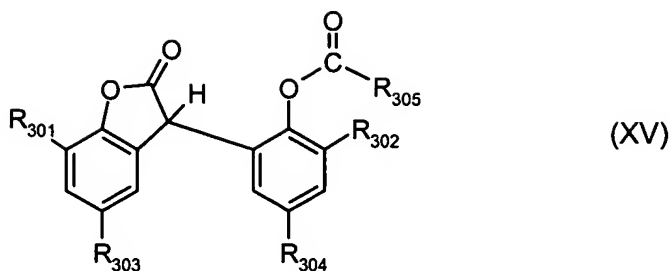
(XIVa)



(XIVb)

or a mixture or blend of the two compounds of formulae XIVa and XIVb.

**13. (currently amended)** A process according to claim 1 wherein the benzofuran-2-one type compound is of formula XV



wherein

$R_{301}$  and  $R_{302}$  are each independently of one another hydrogen or  $C_1$ - $C_8$ alkyl,

$R_{303}$  and  $R_{304}$  are each independently of one another  $C_1$ - $C_{12}$ alkyl[ $[\cdot]$ ] and

$R_{305}$  is  $C_1$ - $C_7$ alkyl.

**14. (original)** A process according to claim 1 wherein the bis-acyllactam is used in an amount of 0.01 to 5 % by weight based on the weight of the polycondensate.

**15. (original)** A process according to claim 1 wherein the phosphite, phosphinate or phosphonate is used in an amount of 0.01 to 5 % by weight based on the weight of the polycondensate.

**16. (original)** A process according to claim 1 wherein the benzofuran-2-one type compound is used in an amount of 0.01 to 5 % by weight based on the weight of the polycondensate.

**17. (currently amended)** A process according to claim 1 wherein the ratio of the bis-acyllactam to b1) the phosphite, phosphinate[ $[\cdot]$ ] or phosphonate or to b2) the benzofuran-2-one type compound or to b3) the sum of all is from 1:10 to 5:1.

**18. (original)** A process according to claim 1 wherein the maximum mass-temperature of the melt is from 170° to 320° C.

**19. (original)** A process according to claim 1 wherein an oxazoline compound is additionally present.

- 20. (currently amended)** A composition comprising
- a) a polycondensate;
  - b) at least one bis-acyllactam~~[[;]]~~ and
  - c1) at least one phosphite, phosphinate or phosphonate; or
  - c2) at least one benzofuran-2-one type compound or
  - c3) at least one phosphite, phosphinate or phosphonate and one benzofuran-2-one type compound.
- 21. (currently amended)** A polycondensate obtained~~able~~ by a process according to clam 1.
- 22. (canceled)**